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A MOUNTING METHOD FOR A SEMICONDUCTOR INTEGRATED CIRCUIT

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[There are no amendments to this patent.]

Abstract

Objective

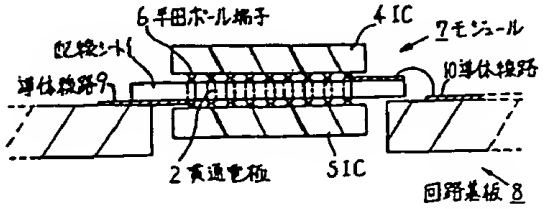
[The present invention] concerns a mounting method for IC semiconductors, and the objective is to reduce the wiring distance between IC chips as much as possible.

Constitution

A mounting method for a semiconductor integrated circuit is designed with the characteristic of forming a module, by installing IC chips so that they face each other at the front and back surfaces of a wiring sheet, in which multiple through electrodes are formed with a pitch that is equal to the pitch of

the electrode terminal of an IC chip, and external connection electrodes which are to be connected to the necessary through electrodes are also equipped and formed, and installing this module as a configuration unit to a wiring substrate.

Principle diagram of this invention



Key: 1 Wiring sheet
2 Through electrodes
6 Soldering ball terminal
7 Module
8 Circuit substrate
9 Conductor line
10 Conductor line

Claims

1. A mounting method for a semiconductor integrated circuit, characterized by forming a module by installing IC chips so that they face each other at the front and back surfaces of a wiring sheet, in which multiple through electrodes are formed with a pitch that is equal to the pitch of the electrode terminal of an IC chip, and external connection electrodes which are to be

connected to the necessary through electrodes are also equipped and formed, and installing said module as a configuration unit to a wiring substrate.

2. The mounting method for a semiconductor integrated circuit described in Claim 1, characterized by the installation of the aforementioned module to the wiring substrate being performed through direct bonding between the external connection electrodes, which are provided at the wiring sheet, and the conductor line of the wiring substrate, or by wire bonding.

3. The mounting method for a semiconductor integrated circuit described in Claim 1, characterized by the aforementioned module being installed over the main IC chip facing the secondary IC chip through the aforementioned wiring sheet, and the aforementioned main IC chip being installed at the wiring substrate.

4. The mounting method for a semiconductor integrated circuit described in Claim 1, characterized by several of the through electrodes, which are formed at the aforementioned wiring sheet, having a structure in which they are connected to each other by circuits.

5. The mounting method for a semiconductor integrated circuit described in Claim 1, characterized by the installation of the aforementioned module to the wiring substrate being obtained by connecting the through electrodes to which electrode terminals at the IC chip are installed to the through electrodes that are at the installation position at the wiring substrate by a conductor line, and by using the through electrodes that are at the aforementioned installation position at the wiring substrate.

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